E. & A. H. NORDYKE.

Grinding Mill.

No. 57,754. Patented Sept. 4, 1866.

Fig. 1

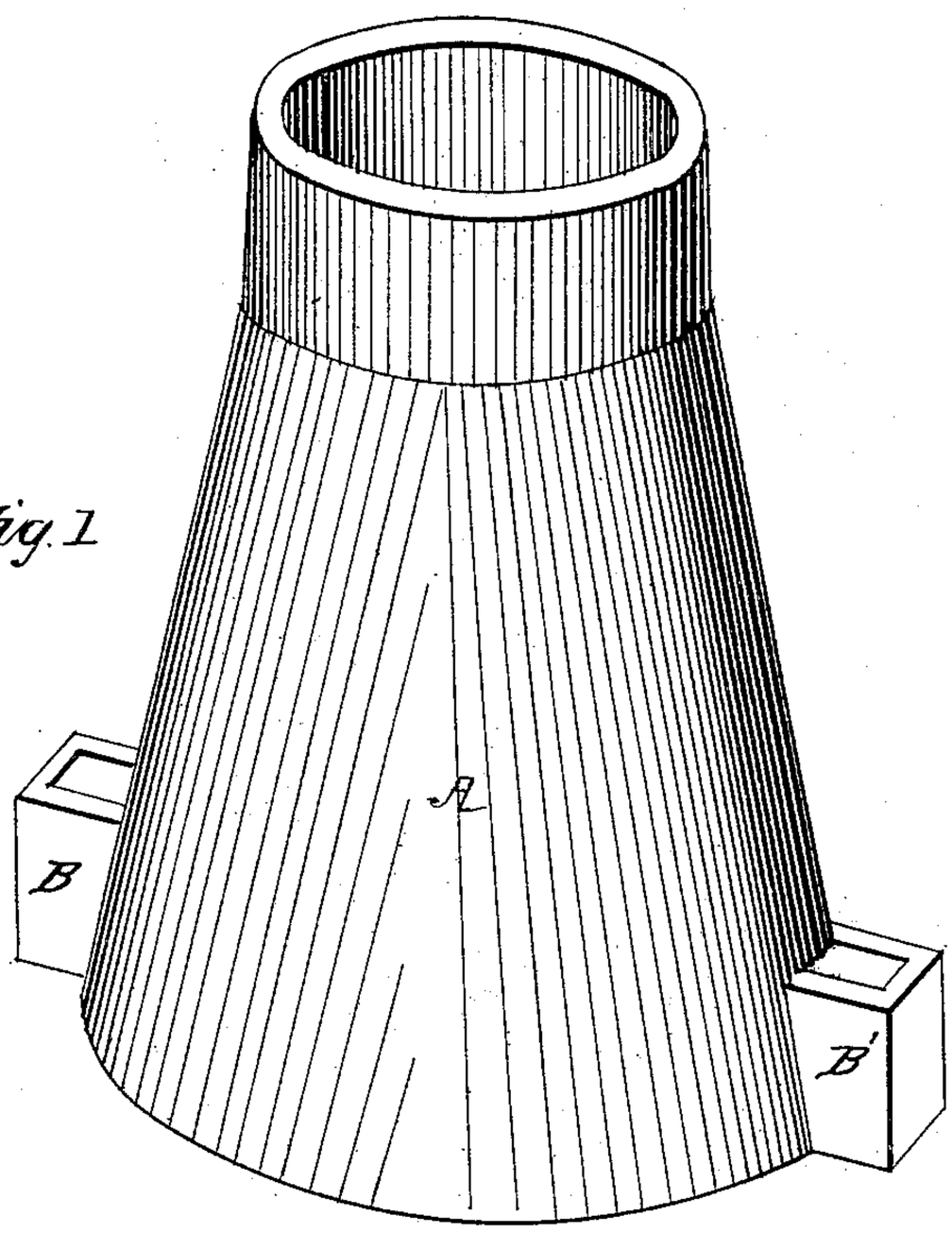
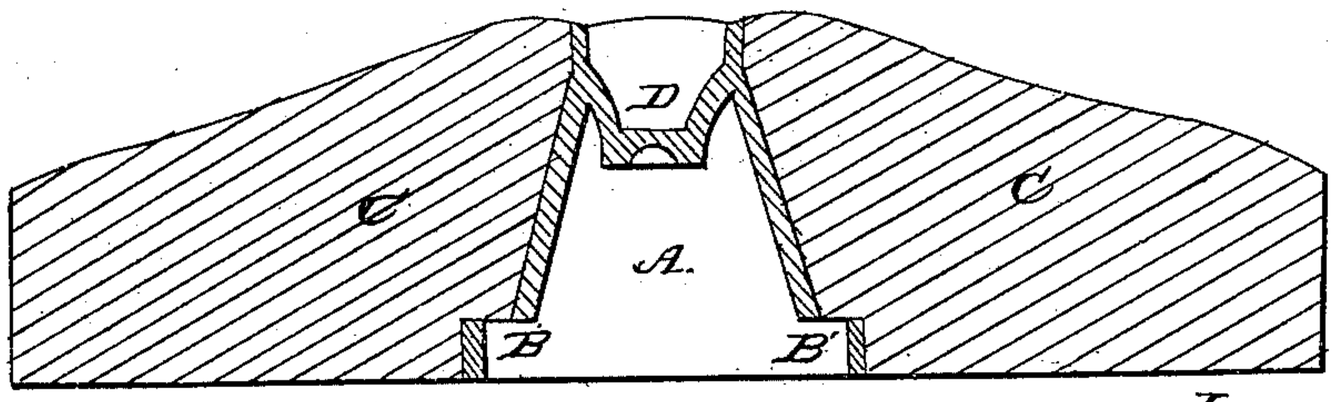


Fig. 2



Witnesses

R. A. Howard

J. Stover

Inventors

Elis Nordyke

A. H. Nordyke

Wm. T. Dennis

UNITED STATES PATENT OFFICE.

ELLIS NORDYKE AND ADDISON H. NORDYKE, OF RICHMOND, INDIANA.

IMPROVEMENT IN GRINDING-MILLS.

Specification forming part of Letters Patent No. **57,754**, dated September 4, 1866.

To all whom it may concern:

Be it known that we, ELLIS NORDYKE and ADDISON H. NORDYKE, of Richmond, Indiana, have invented certain new and useful Improvements in Metallic Eyes for Millstones; and we hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, which form a part of this specification, and to the letters of reference marked thereon.

In the drawings, Figure 1 is a perspective view of our improvement, and Fig. 2 is a vertical section of the same, showing its position in the millstone.

In Fig. 1, A is an inverted hollow cone, the lower end of which is provided with projections or lugs B and B′ upon its outer surface opposite each other. These projections or lugs are of an oblong square form opening into and forming a part of the cavity or hollow of the eye, and are arranged to receive the wings of the driver. These lugs or projections are let into the millstones by means of gains or recesses cut into the same for their reception, as shown in Fig. 2. The upper portion of the cone or eye is constructed with the straight or parallel sides.

In Fig. 2, C and C′ represent the vertical section of the millstone with the eye in its proper position. D, Fig. 2, is a bearing situated in the upper portion of the eye and rigidly attached to the same and composed of an inverted arch or saddle, the lower surface of the center of which is provided with a conical recess to receive the point of the spindle supporting the millstone in its revolutions.

The inverted form of the arched bearing adds much to its strength, allowing the whole to be made much lighter, yet, at the same time, stronger, and permits a much more nicely adjustable balancing of the stone.

This arrangement, as will readily be observed, is intended for that class of burrs in which the silent feed, or feeding the grain to the burrs by means of a tube, is employed. For burrs in which the shoe and shaker are used we construct the bearing D with a suitable opening where the recess is now shown provided with a collar or other suitable device, and by extending the upper portion of the driver through this said opening we attach to it any of the ordinary devices for giving the reciprocating motion to the shoe, as shown in the dotted lines in Fig. 2.

When the arms of the bearing D are straight across the hollow cone, or when they are inclined downward, a difficulty arises in the free discharge of the wheat, as the velocity of the burr gives a centrifugal force to the grains of wheat by which they lodge upon these projections and choke the feed. We deem the upward inclination of these arms as of the greatest importance, as the grain then meets only a smooth surface, and is not interrupted in its free discharge, and actual experiments have proved that from four to six bushels an hour additional can be ground upon the same burrs by the use of this device.

Having thus fully described our said improvement, what we claim as new, and desire to secure by Letters Patent, is—

The herein-described metallic eye for millstones when constructed and operating as described.

ELLIS NORDYKE.
A. H. NORDYKE.

Witnesses:
WM. T. DENNIS,
A. J. BELL.